# In the Claims:

# 1. (Previously Presented) A compound of formula (I)

$$\mathbb{R}^4O_2S$$
 $\mathbb{R}^3$ 
 $\mathbb{R}^4$ 
 $\mathbb{R}^4$ 
 $\mathbb{R}^4$ 
 $\mathbb{R}^4$ 
 $\mathbb{R}^4$ 

or a pharmaceutically acceptable salt thereof in which:

X is selected from the group consisting of oxygen or NR<sup>2</sup>;

 $R^1$  is selected from the group consisting of H,  $C_{1-6}$ alkyl,  $C_{1-2}$ alkyl substituted by one to five fluorine atoms,  $C_{3-6}$ alkenyl,  $C_{3-6}$ alkynyl,  $C_{3-10}$ cycloalkyl $C_{0-6}$ alkyl,  $C_{4-12}$ bridged cycloalkyl,  $A(CR^5R^6)_n$  and  $B(CR^5R^6)_n$ ;

R<sup>2</sup> is selected from the group consisting of H and C<sub>1-6</sub>alkyl;

R<sup>3</sup> is C<sub>1-2</sub>alkyl substituted by one to five fluorine atoms;

R<sup>4</sup> is selected from the group consisting of C<sub>1-6</sub>alkyl, NH<sub>2</sub> and R<sup>8</sup>CONH;

R<sup>5</sup> and R<sup>6</sup> are independently selected from H or C<sub>1-6</sub>alkyl;

A is an unsubstituted 5- or 6-membered heteroaryl or an unsubstituted 6membered aryl, or a 5- or 6-membered heteroaryl or a 6-membered aryl substituted by one or more R<sup>7</sup>;

R<sup>7</sup> is selected from the group consisting of halogen, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl substituted by one more fluorine atoms, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkoxy substituted by one or more F, NH<sub>2</sub>SO<sub>2</sub> and C<sub>1-6</sub>alkylSO<sub>2</sub>;

B is selected from the group consisting of

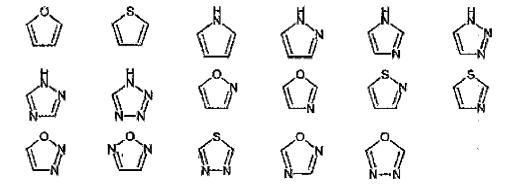
defines the point of attachment of the ring;

R<sup>8</sup> is selected from the group consisting of H, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl, Phenyl, HO<sub>2</sub>CC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl,

 $C_{1-6}$ alkylOCO,  $H_2NC_{1-6}$ alkyl,  $C_{1-6}$ alkylOCONH $C_{1-6}$ alkyl and  $C_{1-6}$ alkylCONH $C_{1-6}$ alkyl; and

n is 0 to 4,

wherein the 5-membered heteroaryl is selected from



and

wherein the 6-membered heteroaryl is selected from









# 2. (Previously Presented) A compound of formula (IA)

$$CF_3$$
 $N$ 
 $N$ 
 $CR^5R^6)_n$ 
 $R^4O_2S$ 
 $(IA)$ 

or a pharmaceutically acceptable salt thereof in which:

R<sup>2</sup> is selected from the group consisting of H and C<sub>1-6</sub>alkyl;

R<sup>4</sup> is selected from the group consisting of C<sub>1-6</sub>alkyl, NH<sub>2</sub> and R<sup>8</sup>CONH;

R<sup>5</sup> and R<sup>6</sup> are independently selected from H or C<sub>1-6</sub>alkyl;

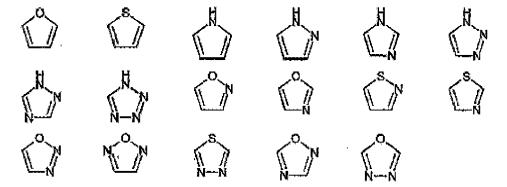
A is  $C_{5-7}$  cycloalkyl or an unsubstituted 5- or 6-membered heteroaryl or an unsubstituted 6-membered aryl, or a 5- or 6-membered heteroaryl or a 6-membered aryl substituted by one or more  $\mathbb{R}^7$ ;

 $R^7$  is selected from the group consisting of halogen,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyl substituted by one more fluorine atoms,  $C_{1-6}$ alkoxy,  $C_{1-6}$ alkoxy substituted by one or more F,  $NH_2SO_2$  and  $C_{1-6}$ alkyl $SO_2$ ;

 $\mathsf{R}^8$  is selected from the group consisting of H, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkoxy,  $\mathsf{C}_{1\text{-}6}\mathsf{alkyl}\mathsf{OC}_{1\text{-}6}\mathsf{alkyl},\,\mathsf{phenyl},\,\mathsf{HO}_2\mathsf{CC}_{1\text{-}6}\mathsf{alkyl},\,\mathsf{C}_{1\text{-}6}\mathsf{alkyl}\mathsf{OCOC}_{1\text{-}6}\mathsf{alkyl},\,\mathsf{C}_{1\text{-}6}\mathsf{alkyl}\mathsf{OCONHC}_{1\text{-}6}\mathsf{alkyl},\,\mathsf{C}_{1\text{-}6}\mathsf{alkyl}\mathsf{oCONHC}_{1\text{-}6}\mathsf{alkyl},\,\mathsf{C}_{1\text{-}6}\mathsf{alkyl};\,\mathsf{and}$ 

n is 0 to 4,

wherein the 5-membered heteroaryl is selected from



and

wherein the 6-membered heteroaryl is selected from











- 3. (Previously Presented) A compound as claimed in claim 1 wherein R<sup>2</sup> is H or methyl.
- 4. (Previously Presented) A compound as claimed in claim 1 wherein R<sup>4</sup> is C<sub>1-3</sub>alkyl.
- 5. (Previously Presented) A compound as claimed in claim 1 wherein R<sup>5</sup> and R<sup>6</sup> are both H.

6. (Previously Presented) A compound as claimed in claim 1 wherein A is selected from the group consisting of C<sub>5-7</sub>cycloalkyl or

defines the point of attachment of the ring

and A is unsubstituted or substituted by one or two R7.

- 7. (Previously Presented) A compound as claimed in claim 1 wherein R<sup>7</sup> is selected from the group consisting of halogen, C<sub>1-3</sub>alkyl, C<sub>1-3</sub>alkyl substituted by one to three fluorine atoms, and C<sub>1-3</sub>alkoxy.
- 8. (Previously Presented) A compound as claimed in claim 1 wherein R<sup>8</sup> is selected from the group consisting of C<sub>1-6</sub>alkyl, phenyl and aminomethyl.
- 9. (Previously Presented) A compound as claimed in claim 1 wherein n is 0 to 2.
- 10. (Canceled)
- 11. (Previously Presented) [4-(5-Methanesulfonyl-pyridin-2-yl)-6-trifluoromethyl-pyrimidin-2-yl]-methyl-(6-methyl-pyridin-2-ylmethyl)-amine; benzyl-[4-(5-methanesulfonyl-pyridin-2-yl)-6-trifluoromethyl-pyrimidin-2-yl]-amine; and cyclohexyl-[4-(5-methanesulfonyl-pyridin-2-yl)-6-trifluoromethyl-pyrimidin-2-yl]-amine.

12. (Currently Amended) A process for the preparation of a compound as defined in claim 1, which comprises:

(A), reacting a compound R<sup>1</sup>XH or a protected derivative thereof with a compound of formula (III)

$$\mathbb{R}^{4}O_{2}\mathbb{S}$$
 $\mathbb{N}$ 
 $\mathbb{N}$ 
 $\mathbb{S}O_{2}$ alikyl
 $\mathbb{N}$ 
 $\mathbb{S}O_{2}$ 

wherein  $R_3$  and  $R_4$  are as defined in claim 1, to produce a compound of formula (I)

and thereafter and if necessary,

- (B), interconverting the compound of formula (I) into another compound of formula (I); and/or
- (C), deprotecting the a protected derivative of compound of formula (I).
- 13. (Currently Amended) A process for the preparation of a compound as defined in claim 2, which comprises:
- (A) reacting an amine HNR<sup>2</sup>(CR<sup>5</sup>R<sup>6</sup>)<sub>n</sub>A or a protected derivative thereof with a compound of formula (III) wherein R<sup>3</sup> is CF<sub>3</sub>

$$\mathbb{R}^4 \mathbb{O}_2 \mathbb{S}$$
 (III)

wherein  $R_4$  is as defined in claim 2, to produce a compound of formula (IA), and thereafter and if necessary,

- (B), interconverting the compound of formula (IA) into another compound of formula (IA); and/or
- (C), deprotecting the a protected derivative of compound of formula (IA).

- 14. (Previously Presented) A pharmaceutical composition comprising a compound as defined in claim 1 in admixture with one or more physiologically acceptable carriers or excipients.
- 15. 19. (Canceled)
- 20. (Previously Presented) A pharmaceutical composition comprising a compound as defined in claim 2 in admixture with one or more physiologically acceptable carriers or excipients.
- 21. 22. (Canceled).
- 23. (Previously Presented) A method of treating a subject suffering from acute or chronic pain which comprises administering to said subject an effective amount of a compound as claimed in claim 1.
- 24. (Previously Presented) The method according to claim 23, wherein said subject is a human.
- 25. (Previously Presented) A method of treating a subject suffering from dysmenorrhoea which comprises administering to said subject an effective amount of a compound as claimed in claim 1.
- 26. (Previously Presented) The method according to claim 25, wherein said subject is a human.
- 27. (Previously Presented) A method of treating a subject suffering from arthritis which comprises administering to said subject an effective amount of a compound as defined in claim 1.
- 28. (Previously Presented) The method according to claim 27 wherein said arthritis is rheumatoid arthritis.

- 29. (Previously Presented) The method according to claim 28 wherein said subject is a human.
- 30. (Previously Presented) A method of treating a subject suffering from osteoarthritis which comprises administering to said subject an effective amount of a compound as defined in claim 1.
- 31. (Previously Presented) The method according to claim 30 wherein said subject is a human.
- 32. (Previously Presented) A method of treating a subject suffering from acute or chronic pain which comprises administering to said subject an effective amount of a compound as claimed in claim 2.
- 33. (Previously Presented) The method according to claim 32, wherein said subject is a human.
- 34. (Previously Presented) A method of treating a subject suffering from dysmenorrhoea which comprises administering to said subject an effective amount of a compound as claimed in claim 2.
- 35. (Previously Presented) The method according to claim 34, wherein said subject is a human.
- 36. (Previously Presented) A method of treating a subject suffering from arthritis which comprises administering to said subject an effective amount of a compound as defined in claim 2.
- 37. (Previously Presented) The method according to claim 36 wherein said arthritis is rheumatoid arthritis.
- 38. (Previously Presented) The method according to claim 36 wherein said subject is a human.

- 39. (Previously Presented) A method of treating a subject suffering from osteoarthritis which comprises administering to said subject an effective amount of a compound as defined in claim 2.
- 40. (Previously Presented) The method according to claim 39 wherein said subject is a human.
- 41. (New) The method according to claim 12, further comprising the step of interconverting the compound of formula (I) into another compound of formula (I).
- 42. (New) The method according to claim 13, further comprising the step of interconverting the compound of formula (IA) into another compound of formula (IA).
- 43. (New) The method according to claim 23, wherein said pain is lower back pain or neck pain.
- 44. (New) The method according to claim 23, wherein said pain is non-specific lower back pain.
- 45. (New) The method according to claim 32, wherein said pain is lower back pain or neck pain.
- 46. (New) The method according to claim 32, wherein said pain is non-specific lower back pain.